

Low Impact Development Task Force Meeting Summary July 24, 2003

Meeting Objectives:

- To provide LID-TF members a chance to present or discuss their own Low Impact Development (LID) efforts or experiences
- To begin gathering information on challenges or impediments to current LID activities
- To determine the needs of the LID-TF for additional presentations at future meetings
- To discuss and agree on a date for the next meeting of the LID-TF

Attendance:

Task Force Members:

John Tippet, Friends of the Rappahannock
Joe Lerch, CBF
Jack Frye, DCR
Bill Springer, HBAV
Barry Fitz-James, VACO (Stafford County)
Jeff Perry, VML (Henrico County)
Helene Merkel, Horne Engineering

Martha Little, CBLAD
Ron Hamm, LID Coalition
Rachel Morris, VFBF
Linda Cole, Navy
Richard Street, SWCDs
Bruce Williams, USACE
Joe Battiat, VDOT (for Ken Smith)

Technical Staff & Interested Parties:

Scott Kudlas, DEQ
Larry Gavan, DCR
Ron Tuttle, Fairfax County Stormwater
Rodney Sobin, DEQ
Ellen Scarff, HBAV
Joan Salvati, Chesterfield County
Burt Tuxford, DEQ

Shep Moon, DEQ
Sharon Baxter, DEQ
Brian Henshaw, NSVRC
Denise Thompson, VML
David Powers, Timmons Group
Jeffrey Watts, VFA
Carla Harris, Loudoun County

Speakers:

Jack Frye, DCR	Barry Fitz-James, VACO
Martha Little, CBLAD	Jeff Perry, Henrico County
Joe Battiat, VDOT	Brian Henshaw, NSVRC
Helene Merkel, Horne Engineering	Richard Street, SWCDs
Linda Cole, Navy	Bill Springer, HBAV

Handouts:

- Dennen, R. "Project's goal: Less pollution in waterways." Fredericksburg.com Available online: <http://www.freelancestar.com> (July 9, 2003).
- Boorstein, M. "Fredericksburg tries natural filtering of storm water." Washington Post. Available online: <http://www.washingtonpost.com> (July 6, 2003).

- Witte, G. "Virginia school leads area into green movement." Washington Post. Available online: <http://www.washingtonpost.com> (July 21, 2003).
- 2003 Chesapeake Bay Small Watershed Grants
- Low Impact Development Annotated Website Review
- The Northern Shenandoah Valley Urban Regional Manual for Low Impact Site Design (A supplement to the Virginia Stormwater Management Handbook) (Handout from Brian Henshaw, NSVRC).
- Merkel, H. Low Impact Development and its application at Army installations. Handout of powerpoint presentation by H. Merkel.
- 2003 Virginia DCR Chesapeake Bay Watershed Grants: Low Impact Development and Innovative Urban BMP Projects (Handout from Jack Frye, DCR).
- Tippet, J. Low Impact Development . . . A Tutorial and Toolkit. CD-ROM Version 1.0 handed out by John Tippet, Friends of the Rappahannock).

Summary:

Jack Frye, Department of Conservation & Recreation

Mr. Frye summarized LID activities by the Department of Conservation and Recreation. Frye mentioned that although DCR does not have a specific program, LID practices could be integrated into other DCR activities. He then organized his talk based on 5 categories of importance for LID including: financial support; technical guidance; regional approaches; technical training/tools; and awareness/public education. Numerous specific examples were discussed. DCR hopes to offer an advanced planner reviewer course next year, integrating more LID practices into curricula compared to the current course offering. DCR feels maintenance/retrofit issues should be addressed sooner rather than later, and citizen/homeowner education is essential.

Comments:

- The DCR/Friends of the Rappahannock Low Impact Development CD-ROM was passed out for review
- Interest in possibly integrating LID techniques on state capitol grounds and at the Governor's mansion

Martha Little, Chesapeake Bay Local Assistance Department

Martha Little discussed how LID fits into the Bay Act requirements, in particular how LID can help meet the general performance criteria and stormwater management requirements in the Chesapeake Bay Preservation Area Management Regulations. She discussed several projects that the Department has undertaken to delve deeper into the relationship between Better Site Design and the Bay Act and most recently to look at the impediments to implementing LID and site design tools at the local level. An analysis of two case studies of Virginia localities demonstrated how impediments in local codes, VDOT standards and regulations and general perceptions were preventing the

implementation of many LID tools. Martha mentioned that the Department plans to continue this work and to analyze even further how to overcome some of the identified impediments. She emphasized the interest the Department has in working with other agencies and in participating in the task force. Ms. Little mentioned that William & Mary is interested in putting on a green roof. It was also mentioned by W&M staff that available grant funds are often difficult to find and would like to see a single site for all state agency grants.

Comments:

- Discussion centered primarily on “by-right.” Localities have until July 2004 to update codes.
- LID technology can be used even in very urban areas. Committee agrees, but there was concern over financial availability.

Joe Battiatà, Virginia Department of Transportation

Mr. Battiatà began by saying that VDOT is not against LID, rather they are unable to treat the road right-of-way as a “site” similar to residential or commercial subdivisions. LID strategies call for manipulation of the development site for the purpose of slowing runoff. The public right-of-way must be engineered for safety and long term utility. VDOT requests that any Task Force recommendations to the legislature or directly to VDOT be specific. VDOT is willing to work with the Task Force or local governments regarding specific requests; however, many comments relating to LID and VDOT are generalizations regarding required street widths and stormwater structures within the right-of-way. He mentioned a potential public health concern over water in ditches and a possible link with West Nile Virus if road-side ditches and swales are to be used to hold stormwater. VDOT is involved in two pilot projects, a swale in Hampton Roads and a Prince William County LID retrofit.

Comments:

- Concerns/discussions over who will inspect LID projects
- VDOT is concerned that with a mandated smaller cul-de-sac radius, emergency vehicles, snowplows, and school buses would not have access – these requirements serve as the basis for most local subdivision street standards.
- Task Force members suggested to have Larry Coffman come to speak on LID

Helene Merkel, Horne Engineering

Ms. Merkel described the Army’s new rating system called SPiRiT, the Sustainable Project Rating Tool. LID applies to numerous SPiRiT categories. Ms. Merkel described four projects, Fort Meade, Maryland, Fort Lee, Virginia, the Army Research Lab, and Fort Belvoir Post Exchange retrofit.

Comments:

- The Army is required to have an integrated natural resources management plan. Suggested requiring these for non-army projects, and including LID.
- Local government representative suggested including LID in the local comprehensive plan.
- Ameri-corps, College/Graduate students were suggested as helpful volunteers for LID projects

Linda Cole, Naval Facilities Engineering Command, Norfolk

Ms. Cole presented the Washington Naval Yard as a demonstration example of the Navy's involvement in LID. The Navy has a Unified Facilities Criteria Manual (*to be emailed*) that discusses LID, its importance, basic design and how to incorporate LID into Naval facility design. Phase II of the naval project is to have LID included into municipal storm water management plans. Ms. Cole stressed the importance of education and awareness.

Comments:

- Beginning December 31, 2005 environmental management must be established for all Department of Defense sites.
- Mentioned that there has been some interest in linking security with environmental protection (i.e.: an embassy design surrounded by a bioretention pond; and a green roof on a facility in Culpepper.

Barry Fitz-James, Stafford County

Stafford County has revised some zoning and subdivision ordinances to include LID. Included are ordinance changes to allow SWM facilities on private lots, changing requirements for curb/gutter from 30,000 to 10,000 sq. ft. A checklist is still not available for LID requirements on a site. Impediments were discussed, including education, compliance with state code, and maintenance agreements with homeowners. Stafford County would like to see specific mention of LID in Virginia State Code.

Comments:

- There may be problems in the future with communities that have developed guidelines for LID before state legislation or good technical advice. It was recommended that state direction is needed.
- Stafford County now plans on creating a workshop based on specific LID calculations

Jeff Perry, Henrico County

Henrico County has developed an environmental fund that developers contribute to, and has also extended the CBPA buffer. Henrico feels their program is working effectively and is concerned about the implications of LID. There is also

concern that a General Assembly mandate will allow developers to require homebuilders to bear the burden and not follow Henrico County requirements.

Comments:

- It was suggested by Chesterfield county to integrate land use, LID and buffers
- A common thread should be hydrology
- Suggested that a small working group for feedback from emergency squad members, site planners, etc. would be beneficial.

Brian Henshaw, Northern Shenandoah Valley Regional Commission

NSVRC held a workshop last July looking at LID and identifying all involved stakeholders. They concluded that major stakeholders are local government, engineers, watershed planners and developers. A manual will be created for Low Impact Site Design via a steering committee of stakeholders. The manual is scheduled for completion next year.

Richard Street, Soil and Water Conservation District

SWCDs have been involved in creating local workshops for homeowner's associations, engineers and developers to discuss LID. Involved individuals are particularly interested in the calculations—specifically how to implement LID on their properties. Mr. Street discussed the importance of educating homeowner's associations on the importance of LID and to possibly integrate LID practices into public schools. SWCD is currently involved in developing software for LID with specific calculations. Mr. Street mentioned legislators want a current list of what localities in Virginia are doing with respect to LID and offered his researched list as a handout at the meeting.

Comments:

- It was suggested that Mr. Street's list be reviewed before offering to the legislature.
- Virginia Tech to possibly provide a listing and relevant listing of rain garden plants
- Suggested homework assignment of negative aspects (impediments) of LID.

Bill Springer, Home Builders Association of Virginia

Mr. Springer mentioned that New Jersey is also looking at LID, and they are using Prince George's county as an example.

Comments: Bruce Williams, USACE

- Possible incentives for developers who utilize LID?
- Would like to give permittees some kind of incentive or credit

HOMEWORK: Due to Scott Kudlas **Thursday, August 7, 2003**

- Impediments/Barriers to use of LID
- List of identified practices

- Potential Incentives